

Impact of China Slowdown on India

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Introduction

After three decades of double-digit growth, China is slowing as it is rebalancing its economy from export-driven to less-volatile domestic consumption driven economy. The impact of China slowdown on India has been a topic of debate since last year. According to the Finance Minister Arun Jaitley, slowdown in the Chinese economy will not impact India as it is not part of Chinese supply chain and India could become the "additional shoulder" the global economy needs to stand on. Niti Ayog Vice Chairman Arvind Panagariya commented that India will not be impacted as long as the reform initiatives continue: *As China reorients its domestic demand and starts exporting less, it will give India the opportunity to take part in the market space China currently occupies.* However, RBI governor Raghuram Rajan contradicted the government's recent assertions and stated that 'China's pain of economic slowdown can be India's pain too'.

In Section I, the paper examines whether India can indeed provide the additional shoulder for global growth. Section II studies the impact of China slowdown on India through different channels. The econometric analysis for both direct and indirect impact of China slowdown on India is given in Section III with the conclusion in Section IV.

Section I: Can India replace China as Global growth engine

China's share in global GDP tripled from 3.6% in 2000 to 15.5% in 2015 as it grew at a breakneck speed for three decades. During the same period India's share in global GDP also doubled from 1.4% to still low 3%.

However, recently, China's GDP growth slowed, from nearly 10% annual growth rate observed in last three decades after it started its reforms in 1979, to a more sustainable 6.8% yoy in 2015 - lowest in 25 years. On the other hand, India has emerged as the fastest growing economy among the major countries in the world with an expected growth rate of 7.6% in FY 2015-16. But the expectation that India will take up the position from China as world's growth engine is erroneous.

According to World Bank, the GDP of US, the largest economy, is over \$17 trillion while that of China is just over \$10 trillion. In comparison, India's GDP is just over \$2 trillion, one fifth of that of China. So, even if India grows faster than China, the magnitude of the impact on world GDP will be much smaller. A significantly bigger but marginally slower China will continue to contribute more to global output compared to a much smaller but faster growing India.

Chart 1: China and India's share in Global GDP



Source: IMF Data

China contributes more than 1% to global growth while India contributes a mere 0.2%. Even if India grows faster in coming years, its contribution to global growth will remain miniscule and slower China will continue to contribute more than 1%.

Stronger growth, higher industrial production and increased investment in infrastructure have made China the largest consumer of commodities in the world, particularly metals. The share of infrastructure investment in China has been more than 20% of GDP while that in India remained in single digits with annual spending on infrastructure in China reported to be ten times that in India in USD terms. So, obviously, China's demand for metals has been almost 15 times that of India in 2014 as seen in the chart below. India consumed around 80 million tons of steel in 2014 as against China's 800 million tons.

Chart 2: China's consumption of key commodities

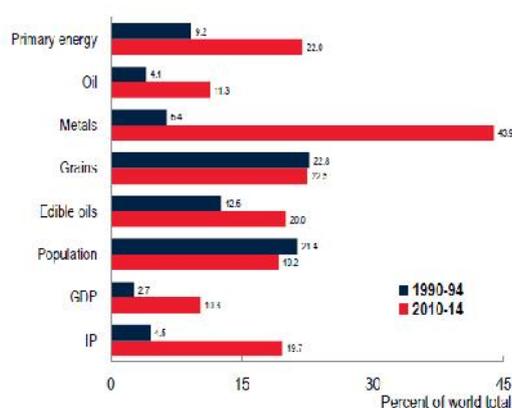
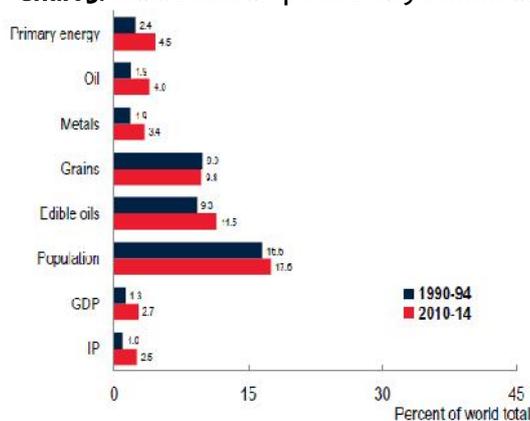


Chart 3: India's consumption of key commodities



Source: World Bank, BP Statistical Review of World Energy, World Bureau of Metals Statistics, U.S. Department of Agriculture.
Note: IP denotes Industrial production.

As China slows down and its growth model shifts from industry-led towards more services-based growth, the demand for commodities, both metal and oil, has softened. According to some estimates, one percentage point (pp) decrease in Chinese GDP is equivalent to 0.3 pp fall in global growth while 5% fall in China's fixed investment can translate to 0.3% to 0.5% fall in global GDP growth. So, a slowdown in Chinese economy has led to a sharp fall in commodity prices. At the same time, India continues to remain a service led economy with no significant change in growth drivers and hence demand for global commodities.

As a result, even though India is usurping China as the fastest growing major economy in the world, it is impractical to expect India to take the place of China as a major contributor to growth or consumer for industrial commodities in the short term. Indian economy being a fifth of the Chinese economy and also less material intensive can hardly substitute for China as a global growth driver.

Few studies have explicitly compared China with India using a directly comparable framework giving adequate attention to the measurement issues. Broader multi-country studies such as Wilson and Purushothaman (2003),

Bosworth and Collins (2003), Jorgenson and Vu (2005) and Fan and Felipe (2005) have made useful comparisons but do not predict the impact of one on another. Bosworth and Collins (2007) have made a growth decomposition focussing on the productivity impact of sectoral reallocation of labour. Fan and Felipe examine China and India's growth performance from the income side, looking at the sustainability of investment through an analysis of profit rates using a classical (Marx-inspired) approach. The results question the sustainability of the much higher rate of capital accumulation in China as compared with India, given an apparent ongoing fall in the economy-wide profit rate.

The primary difference between the performance of the Indian and Chinese economy has been faster growth of the capital stock in China. Moreover, Chinese growth has been built on infrastructure, investment and manufacturing, while India lags far behind China on all these dimensions and its growth has been primarily service sector driven. Manufacturing is about 17% of the Indian economy, compared to China's about 30%. China has arguably the best physical infrastructure outside the western world. India's looks more like the poor country that it still is. Therefore it is difficult to say that India could take the position of China in near future.

However India could surpass the growth rate of China, according to many Researchers. World Economic Outlook (WEO) report from the International Monetary Fund (IMF) stated that India's growth rate is set to further outstrip China's in 2016 with the gap between the two economies expected to widen to over 1%. The Financial Times report said that India's Growth rate has surpassed both China and the U.S. as the world's top destination for greenfield foreign investment, and a simultaneous 16-place jump in the World Economic Forum's global rankings for competitiveness. However few researchers doubt the impressive India's headline growth rate and say that it is partly the result of changes to statistical methods that seek to capture more evidence of economic activity.

Few reports on Global economy warn that instability and slowdown in the world economy can also affect India. IMF warned that downside risks such as a sharper-than-expected slowdown in China's growth, tighter global financial conditions as the US exits from an easy monetary policy, a sudden rise in global risk aversion and an escalation of current geo-political tensions could derail the slow global economic recovery.

Dr. Raghuram rajan says that the Chinese slowdown is a concern for the whole world. There is a lower demand for some of our exports to China. But indirectly too, many of the countries are not exporting to China as much as they did and they are buying less from us, But India being a commodity importer, has been helped a bit by cheaper commodities. China's slowdown has impacted global growth and India is very well integrated into the global economy.

Commerce Minister Nirmala Sitharaman rightly points out, "It is a worrying development as it will make imports from China cheaper and our products more expensive." Slowing down of economy in China will also create excess capacities, leading to increased dumping of cheap products from China.

Section II: Impact of China slowdown on India

Chinese slowdown can impact India through various direct channels like trade, investment and indirect channels like lower commodity prices, financial volatility and higher economic uncertainty.

Trade with China

India's trade with China has increased over the years as China emerged as its largest trade partner replacing US since 2008. Total trade (Export plus Import) with China has increased 5.7 times to \$72.4 billion in FY 2014-15 from \$12.7 billion in FY 2004-05. Interestingly while India maintains a trade surplus with USA, its trade deficit with China has been widening significantly over the years (table 1). Its trade deficit with China has reached an unsustainable level of \$48.5 billion in FY 2014-15, with imports from China being more nearly five times of India's exports to China.

Table 1: Trend in trade with China

	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	Apr-Dec 2015
Export	5.6	6.8	8.3	10.8	9.3	11.5	15.5	18.3	13.5	15.0	12.0	6.9
Import	7.1	10.9	17.4	27.1	32.1	30.8	43.5	57.6	52.2	51.1	60.4	47.1
Trade Deficit	-1.5	-4.1	-9.2	-16.3	-22.9	-19.3	-28.0	-39.3	-38.7	-36.1	-48.5	-40.2

Source: CMIE database, CPR research

India's export basket to China consists of primarily resource based products including chemicals, raw cotton, petroleum products and spices. Considering slowdown in Chinese growth rate, the demand for such products may decline as had already started in FY 2014-15 when Indian exports to China fell by 20%. They are also down by a whopping 25% in the current fiscal year (April to December 2015). In contrast, India's imports from China grew at healthy 18% in FY 2014-15 and remain in positive territory even during the current year. This divergent behaviour has brought the trade deficit with China in sharper focus.

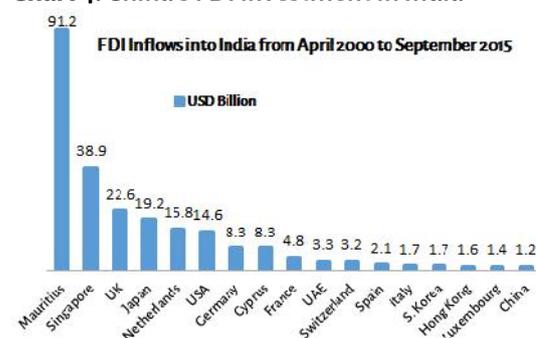
India's trade still remains less vulnerable to Chinese slowdown as first, India's services exports remains at 50% of overall exports (merchandise and services) to the world and China's presence in \$235 billion (inflows plus outflows) services trade is miniscule. Second, India's exports to China represents only 3.9% of total exports to the world while its import from China has a higher share of 13.5% in its total imports of \$447 billion in FY 2014-15.

Investments from China

China has been slow in investing in India.

Its cumulative investment by end 2014 stood at mere \$500 million over a period of 14 years, even less that invested by Poland, Malaysia or Canada. Chinese President Xi Jinping, in his last visit, announced an investment of \$20 billion over next five years.

Chart 4: China's FDI investment in India

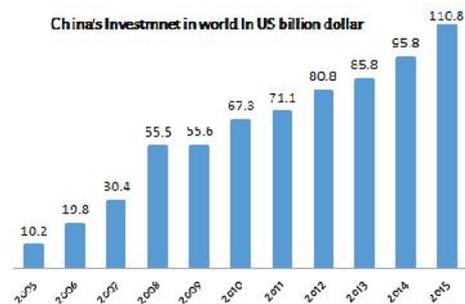


Source: DIPP, CPR Research

Since then, its cumulative investment till September 2015 has increased to \$1.2 billion – still very minimal in total stock of \$392 billion cumulative FDI inflows into India.

Unlike its investment history in India, China has been investing significantly in other countries. It has been reported by UNCTAD (United Nations Conference on Trade and Development) that China was the third biggest source of foreign direct investment in 2013, having invested more than \$100 billion in other countries. In the eleven years to 2015, it invested more than \$683 billion in different countries in the world including India.

Chart 5: China's trend of FDI investment



Source: China Global Investment Tracker, CPR Research

There are many reasons for low FDI flows from China to India. First, the political trust deficit between the two countries, with some Chinese companies under government scanner, has hampered easy flow of investments from China. Second, Chinese investment in other countries has been traditionally focused on acquiring natural resources to boost its economic growth – like its investment in oil, natural gas and coal sectors in Africa, Australia, Indonesia etc. These investments were part of its strategic priority. India, being a major importer of these resources, did not attract Chinese investments. Third, China has been slow in recognising the importance of India's market while India too has been slow in attracting Chinese investors. Fourth, Chinese firms do not have the adequate support networks.

India's infrastructure sector, with its massive investment needs, can be the natural destination for Chinese investments. China has excess capital along with the expertise for developing large infrastructure projects both at home and abroad. On the other hand, India is infrastructure deficient. Investment in India's infrastructure can be the basis of stronger relationship between the two major neighbouring economies.

Impact of lower commodity prices

The slowdown in China has resulted in a sharp fall in commodity prices. India, being the major importer of oil and other minerals, has benefited from softer oil and commodity prices. First, lower oil price has helped in reducing India's import bill that narrowed the trade deficit. This has brought the current account deficit (-1.6% of GDP as on September 2015) much lower than sustainable level of 2.5% reducing external vulnerability. Second, fiscal deficit target of 3.9% of GDP for FY 2015-16 will be met as lower oil prices have reduced the oil subsidy payment (with oil price deregulated) and higher excise duties on petrol and diesel have significantly increased indirect tax collection that will more than offset any shortfalls in direct tax and disinvestment target. Third, lower commodity prices helped bring retail inflation (CPI) within the RBI target of 6% by March 2016 and central bank responded by

slashing policy rate by 125 bps since last year. Overall, softer commodity prices have helped improve macro stability of India. Fourth, lower raw material and oil price helped corporates to improve their profit margins.

However, lower oil prices have slowed the growth of remittance flows to India. The World Bank reported that India, the largest recipient of remittances, received an estimated \$70.3 billion or nearly Rs. 4.5 lakh crore in 2014. According to the Reserve Bank of India, about 35% of these remittances to India originate in the GCC countries. Lower oil prices along with real appreciation of the rupee, has resulted in slower growth of 0.6% in 2014 as compared to 1.7% in 2013. Going forward, continued low oil prices could further reduce remittance flows from the GCC countries. This can be a major impact as in the past, remittances have surpassed foreign direct investment (FDI) flows over the years, financing about 47 percent of the merchandise trade deficit in FY 2013-14.

Section III: Empirical Evidence of the Impact of China on India

We tried to look at the impact of China slowdown on global trade, growth, financial volatility (vix index), bond spread, oil price etc. We found significant direct impact of China slowdown on these indicators.

We estimated that the long-run elasticity of India's GDP growth to China's GDP growth is about 0.4, meaning that a 0.5pp decline in Chinese performance could shave off 0.2pp from India's growth. The same elasticity is slightly higher for industrial production. However, in the short-run, the effect could be amplified by the interaction of many factors. One way to take into account these is to estimate an extended single-equation regression as follows:

$$\log(\text{GDP}_t\text{India}) = c + a_1 \log(\text{GDP}_t\text{China}) + a_2 \log(\text{Oil}_t\text{basket}) + a_3 \log(\text{IP}_t\text{World}) + a_4 \log(\text{ER}_t(\text{INR,USD})) + a_5 \text{Dummy}_t(2008-09) + e$$

Where all variables are taken at quarterly frequency between 2000 and 2015 and are expressed in terms of their YoY growth rates. Variables used are India's GDP, China's GDP, Indian oil basket, World industrial production, Exchange rate (INR and USD). The dummy has been introduced to take into account the financial crisis period.

As expected, we found that China's GDP and global industrial production have significant positive co-relation with India's GDP growth whereas crude oil prices and the exchange rate have significant negative co-relation.

Using this simplified setting, we empirically conducted a scenario analysis and found that a 50bp (permanent) decrease in China's growth (which we termed as soft landing) will cut India's growth by 30bp at first while the effects vanish over the long run. In case China slows down by 150 bp (termed as hard landing), India's GDP growth could fall as much as 80bp. However, things could get much worse for India if the rupee devalues to above 80 INR/USD at the same time. (Note: tables of the regression will be published in forthcoming paper)

Section IV: Conclusion

- India cannot replace China as global growth engine in the short run as India's GDP is just over \$2 trillion, mere one fifth of that of China. So, even if India grows faster than China, the magnitude of the impact on world GDP will be much smaller.
- China has emerged as the largest trading partner of India since 2008. However, India's trade still remains less vulnerable to Chinese slowdown directly because India's services exports account for as much as 50% of India's overall exports (merchandise and services).
- China's total FDI investment in India has been miniscule - \$1.2 billion till September 2015. But India's infrastructure sector can be the natural destination for Chinese investments.
- India reaped the indirect benefit of lower commodity prices in terms of narrower CAD, softening inflation, lower interest rate, increased government fiscal bonanza, all of which contributed to greater macro-stability in India.
- Any financial stress due to Chinese Renminbi depreciation would also negatively impact India's capital markets and could result in capital outflows as investors' confidence in emerging markets takes a knock
- A 50bp decline in China's growth rate is likely to lower India's growth by 30bp in the short run. In case China slows down by 150 bp (hard landing), India's GDP growth could fall as much as 80bp.

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